

Substitute for Form 1449A/PTO (Modified)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

MAR 03 2003

(Use as many sheets as necessary)

Sheet

1

of

7

Application Number

10/078,282

Filing Date

February 19, 2002

First Named Inventor:

Mark W. Miles

Group Art Unit

2873


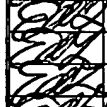
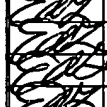
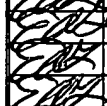


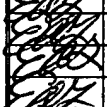






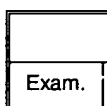
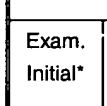
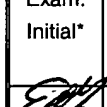
Examiner Name

Evelyn A. Lester

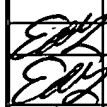
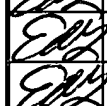
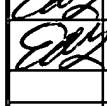
Attorney Docket Number

05652.P014XD2

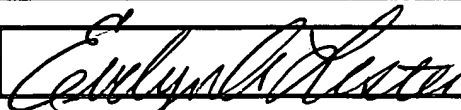
U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
	✓	2,534,846		Ambrose et al.	12/19/50	
	X	3,439,973		Paul et al.	4/22/69	
	X	3,443,854		Weiss	5/13/69	
	X	3,653,741		Marks	4/4/72	
	✓	3,656,836		de Cremoux et al.	4/18/72	
	X	3,813,265		Marks	5/28/74	
	✓	3,955,880		Lierke	5/11/76	
	X	4,099,854		Decker et al.	7/11/78	
	X	4,228,437		Shelton	10/14/80	
	✓	4,377,324		Durand et al.	3/22/83	
	X	4,389,096		Hori et al.	6/21/83	
	✓	4,403,248		te Velde	9/6/83	
	X	4,445,050		Marks	4/24/84	
	✓	4,459,182		te Velde	7/10/84	
	X	4,519,676		te Velde	5/28/85	
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FOREIGN PATENT DOCUMENTS

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				
		WO 95	30,924		Etalon, Inc.	11/16/95		
		EPO	0,667,548	A1	AT & T Corp.	8/16/95		
		JP	405,275,401	A1	Ikeda	10/22/93		

Examiner Signature



Date Considered

7/12/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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MAR 03 2003

Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number 10/224,029 10/078282
 Filing Date August 19, 2007
 First Named Inventor: Mark W. Miles
 Group Art Unit 2873
 Examiner Name Not yet assigned
 Attorney Docket Number 05652.P016XD2

Sheet 2 of 7

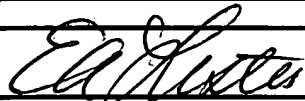
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		Number	Kind Code ² (If known)			
XXX	X	4,663,083		Marks	5/5/87	
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XXX	X	4,748,366		Taylor	5/31/88	
XXX	X	4,786,128		Birnbach	11/22/88	
XXX	✓	4,790,635		Apsley	12/13/88	
XXX	X	4,900,395		Syversen et al.	2/13/90	
XXX	✓	4,982,184		Kirkwood	1/1/91	
XXX	✓	5,022,745		Zayhowski et al.	6/11/91	
XXX	✓	5,044,736		Jaskie et al.	9/3/91	
XXX	X	5,075,796		Schildkraut et al.	12/24/91	
XXX	✓	5,078,479		Vuilleumier	1/7/92	
XXX	X	5,124,834		Cusano et al.	6/23/92	
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XXX	✓	5,153,771		Link et al.	10/6/92	
XXX	✓	5,168,406		Nelson	12/1/92	
XXX	X	5,228,013		Bik	7/13/93	
XXX	✓	5,231,532		Magel et al.	7/27/93	
XXX	✓	5,233,459		Bozler et al.	8/3/93	
XXX	✓	5,311,360		Bloom et al.	5/10/94	
XXX	X	5,326,430		Cronin et al.	7/5/94	

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		Office ³	Number ⁴	Kind Code ⁵ (If known)				

Examiner
Signature

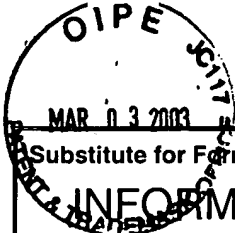


Date Considered
7-12-04

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Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/078,282
Filing Date	February 19, 2002
First Named Inventor:	Mark W. Miles
Group Art Unit	2873
Examiner Name	Evelyn A. Lester
Attorney Docket Number	05652.P014XD2

Sheet 3 of 7

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	X	5,358,601		Cathey	10/25/94	
	✓	5,381,253		Sharp et al.	1/10/95	
	X	5,401,983		Jokerst et al.	3/28/95	
	✓	5,459,610		Bloom et al.	10/17/95	
	X	5,497,172		Doherty et al.	3/5/96	
	X	5,500,635		Mott	3/19/96	
	✓	5,500,761		Goossen et al.	3/19/96	
	X	5,526,327		Cordova, Jr.	6/11/96	
	X	5,552,925		Worley	9/3/96	
	✓	5,579,149		Moret et al.	11/26/96	
	✓	5,619,059		Li et al.	4/8/97	
	X	5,629,790		Neukermans et al.	5/13/97	
	✓	5,636,052		Arney et al.	6/3/97	
	X	5,636,185		Brewer et al.	6/3/97	
	✓	5,673,139		Johnson	9/30/97	
	X	5,683,591		Offenberg	11/4/97	
	X	5,703,710		Brinkman et al.	12/30/97	
	✓	5,710,656		Goossen	1/20/98	
	X	5,726,480		Pister	3/10/98	
	✓	5,739,945		Tayebati	4/14/98	
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		Office ³	Number ⁴	Kind Code ⁵ (If known)				

Examiner Signature

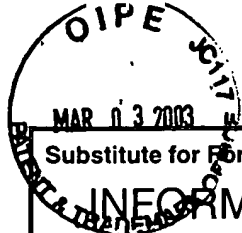
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Group Art Unit	2873
Examiner Name	Evelyn A. Lester
Attorney Docket Number	05652.P014XD2

Sheet 4 of 7

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<i>EW</i>	X	5,793,504		Stoll	8/11/98	
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<i>EW</i>	✓	6,055,090		Miles	4/25/00	
<i>EW</i>	X	6,100,872		Aratani et al.	8/8/00	
<i>EW</i>	✓	6,243,149	B1	Swanson et al.	6/5/01	

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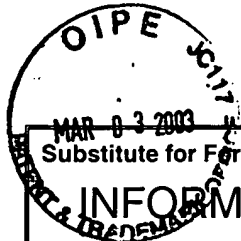
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Group Art Unit	2873
Examiner Name	Evelyn A. Lester
Attorney Docket Number	05652.P014XD2

Sheet 5 of 7

OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
EDZ	X	"Light Over Matters," June 1993, Circle No. 36	
EDZ	✓	AKASAKA, "Three-Dimensional IC Trends," Proceedings of IEEE, Vol. 74, No. 12, Dec. 1986, pp. 1703-1714	
EDZ	✓	ARATANI, et al., "Process and Design Considerations for Surface Micromachined Beams for a Tuneable Interferometer Array in Silicon," Proc. IEEE, Microelectromechanical Workshop, Ft. Lauderdale, FL, Feb. 7-10, 1993, pp. 230, et. seq.	
EDZ	✓	ARATANI, K. et al. "Surface micromachined tuneable interferometer array," <u>Sensors and Actuators</u> , 1994, pp. 17 - 23.	
EDZ	✓	CONNER, "Hybrid Color Display Using Optical Interference Filter Array," <u>SID Digest</u> , 1993, pp. 577-580.	
EDZ	✓	GOOSEN, et al., "Possible Display Applications of the Silicon Mechanical Anti-Reflection Switch," <u>Society for Information Display</u> , 1994.	
EDZ	✓	GOOSEN, et al., "Silicon Modulator Based on Mechanically-Active Anti-Reflection Layer with One M Bit/Sec Capability for Fiber-in-the-Loop Applications," <u>IEEE, Photonic Technology Letters</u> , Sep. 1994.	
EDZ	X	GOSCH, "West Germany Grabs the Lead in X-Ray Lithography," <u>Electronics</u> , Feb. 05, 1987, pp 78 - 80.	
EDZ	X	HOWARD, "Nanometer-Scale Fabrication Techniques," <u>VLSI Electronics: Microstructure Science</u> , Vol. 5 1982, pp. 145-153, pp. 166-173.	
EDZ	X	IBOTSON, et al. Comparison of XeF ₂ and F-atom reactions with Si and SiO ₂ , <u>Applied Physics Letters</u> . Vol. 44, No. 12, June 1984, pp 1129-1131.	
EDZ	✓	JACKSON, "Classical Electrodynamics," John Wiley & Sons, Inc., pp. 568 - 573. NO DATE PROVIDED.	
EDZ	✓	JERMAN, et al., "A Miniature Fabry-Perot Interferometer with a Corrugated Silicon Diaphragm Support," <u>Sensors and Actuators A</u> , 1991, Vol. 29, pp. 151.	

Examiner Signature	<i>E. A. Lester</i>	Date Considered	7-12-04
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Filing Date	February 19, 2002
First Named Inventor:	Mark W. Miles
Group Art Unit	2873
Examiner Name	Evelyn A. Lester
Attorney Docket Number	05652.P014XD2

Sheet	6	of	7
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OTHER ART - NO PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>EDL</i>	X	JOHNSON, "Optical Scanners." Microwave Scanning Antennas, Vol. 1 p. 251 et seq. <i>NO DATE PROVIDED.</i>	
<i>EDL</i>	✓	MILES, MARK, W., "A New Reflective FPD Technology Using Interferometric Modulation," Society for Information Display '97 Digest, Session 7.3	
<i>EDL</i>	X	Newsbreaks, "Quantum-trench devices might operate at terahertz frequencies," Laser Focus World May 1993	
<i>EDL</i>	X	OLINER, "Radiating Elements and Mutual Coupling," <u>Microwave Scanning Antennas</u> , Vol. 2, p. 131 et seq, <i>1966.</i>	
<i>EDL</i>	✓	RALEY, et al., "A Fabry-Perot Microferometer for Visible Wave Lengths," IEEE Solid-State Sensor and Actuator Workshop, June 1992, Hilton Head, SC.	
<i>EDL</i>	X	SCHNAKENBERG, et al. TMAHW Etchants for Silicon Micromachining, <i>1991</i> International Conference on Solid State Sensors and Actuators - Digest of Technical Papers. pp. 815-818.	
<i>EDL</i>	✓	SPERGER, et al., "High Performance Patterned All-Dielectric Interference Colour Filter for Display Applications," SID Digest, 1994.	
<i>EDL</i>	X	STONE, "Radiation and Optics, An Introduction to the Classical Theory," McGraw-Hill pp. 340 - 343, <i>1963.</i>	
<i>EDL</i>	✓	WALKER, et al., "Electron-Beam-Tunable Interference Filter Spatial Light Modulator," Optics Letters, Vol. 13, No. 5, 1988 pp. 345, et seq.	
<i>EDL</i>	X	WILLIAMS, et al. Etch Rates for Micromachining Processing - Journal of Microelectromechanical Systems. Vol. 5 No. 4, December 1996, pp 256-269.	
<i>EDL</i>	X	WINTERS, et al., The etching of silicon with XeF ₂ vapor. Applied Physics Letters, Vol. 34. No. 1, Jan. 1979, pp. 70-73.	

Examiner Signature	<i>Ed Lester</i>	Date Considered	<i>7/12/04</i>
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